

## ABSTRACT

### **METHOD AND DEVICE FOR DETECTING DIRECTION OF MEMBER HAVING OUTER PERIPHERY FORMED IN VERTICALLY ASYMMETRICAL SHAPE**

**[0058]** A method and a device for identifying an upper surface and a lower surface of a component having asymmetric upper and lower outer shapes are provided. The components include, for example, disk-like, cylindrical, or annular components, more specifically engine parts having an orientation such as piston rings. In particular, a method and a device for identifying orientation of an item that hardly allows visual identification of the upper and lower surface. A disk-like, cylindrical, or annular component having asymmetric upper and lower outer shapes is placed on a reference surface having a reference block, an outer peripheral part of the component on the reference surface is brought into contact with the reference block, and identification of the upper and lower surface of the component is achieved in an inline system based on a gap created between the outer peripheral part of the component and the reference block, using a light source lighting device and a detection camera arranged across the reference block.